

CLAIM AMENDMENTS

1-71. (Canceled)

72. (Currently Amended) A computer-implemented method for generating a schedule for a project, the method comprising:

receiving resource information describing resources available to tasks of the project and resource constraints, a first resource having a first resource constraint and a second resource having a second resource constraint, the first and second resources being different;

receiving task information identifying tasks of the project and task constraints, a task specifying one or more resources that are to be used to complete the task, at least one designated task having a designated task constraint and specifying at least the first resource and the second resource;

automatically subdividing the designated task into a first assignment and a second assignment, the first assignment and the second assignment being subdivisions of the designated task, the first assignment completable by only the first resource and having a first assignment constraint based on the designated task constraint, the second assignment completable by only the second resource and having a second assignment constraint based on the designated task constraint; and

individually scheduling the first assignment and the second assignment, ~~independently,~~ the first assignment being scheduled based at least on the first assignment constraint and the first resource constraint, and the second assignment being scheduled based at least on the second assignment constraint and the second resource constraint so that the first assignment is scheduled to start at a time that is ~~independent of~~ different from a time at which the second assignment is scheduled to start.

73. (Previously Presented) The method of claim 72 including:
receiving priorities for the tasks; and
scheduling the assignments of a high priority task before scheduling the
assignments of a low priority task.

74. (Previously Presented) The method of claim 72 including:
receiving priorities for the tasks;
setting priorities of assignments based on the priority of their tasks;
adjusting the priority of assignments based on availability of the resources of the
assignments; and
scheduling the assignments in the adjusted priority order.

75. (Currently Amended) The method of claim 72 including:
receiving a specification of dependencies between tasks; and
scheduling the assignments of ~~independent-tasks~~ without dependencies before the
assignments of ~~dependent-tasks~~ with dependencies.

76. (Currently Amended) The method of claim 72 including:
receiving a specification of dependencies between tasks; and
scheduling the assignments of tasks in dependency order of the tasks.

77. (Previously Presented) The method of claim 72 including
receiving a time constraint of a task; and
scheduling the assignments of tasks so that the time constraint of the task is
satisfied.

78. (Previously Presented) The method of claim 72 wherein the scheduling of
the assignments of tasks schedules assignments to satisfy start-on constraints before
satisfying must-finish-by constraints.

79. (Currently Amended) A computer-readable medium encoded with computer-executable instructions for controlling a computer system to generate a schedule for a project, by a method comprising:

providing resource information describing resources available to tasks of the project and resource constraints, a first resource having a first resource constraint and a second resource having a second resource constraint;

providing task information identifying tasks of the project and task constraints, a task specifying one or more resources that are to be used to complete the task, at least one designated task having a designated task constraint and specifying at least the first resource and the second resource;

automatically subdividing the designated task into component assignments, the component assignments including a first assignment completable by the first resource and having a first assignment constraint based on the designated task constraint, and including a second assignment completable by the second resource and having a second assignment constraint based on the designated task constraint;

individually scheduling the first assignment to start at a first start time based at least on the first assignment constraint and the first resource constraint; and

individually scheduling the second assignment to start at a second start time based at least on the second assignment constraint and the second resource constraint ~~so that the component assignments can be scheduled to start at different times wherein the first start time can be different from the second start time.~~

80. (Previously Presented) The computer-readable medium of claim 79 including:

providing priorities for the tasks; and

scheduling the assignments of a high priority task before scheduling the assignments of a low priority task.

81. (Previously Presented) The computer-readable medium of claim 79 including:

- providing priorities for the tasks;
- setting priorities of assignments based on the priority of their tasks;
- adjusting the priority of assignments based on availability of the resources of the assignments; and
- scheduling the assignments in the adjusted priority order.

82. (Previously Presented) The computer-readable medium of claim 79 including:

- scheduling the assignments of independent tasks before the assignments of dependent tasks.

83. (Previously Presented) The computer-readable medium of claim 79 including:

- providing a specification of dependencies between tasks; and
- scheduling the assignments of tasks in dependency order of the tasks.

84. (Previously Presented) The computer-readable medium of claim 79 including providing a time constraint of a task; and scheduling the assignments of tasks so that the time constraint of the task is satisfied.

85. (Previously Presented) The computer-readable medium of claim 79 wherein the scheduling of the assignments of tasks schedules assignments to satisfy start-on constraints before satisfying must-finish-by constraints.

86. (Currently Amended) A computer system for generating a schedule for a project, comprising:

a computer-readable medium containing resource information describing resources available to tasks of the project and resource constraints, a first resource having a first resource constraint indicating time-slots in which the first resource is available to work on an assignment and a second resource having a second resource constraint indicating time-slots in which the second resource is available to work on an assignment, and containing task information identifying tasks of the project and task constraints wherein a task constraint is a scheduling constraint that limits a manner in which the assignments are scheduled, a task specifying one or more resources that are to be used to complete the task, at least one designated task having a designated task constraint and specifying at least the first resource and the second resource;

a component to ~~subdivide~~ generate component assignments by subdividing the designated task by the number of resources assigned to the designated task into component assignments, the component assignments including a first assignment completable by the first resource and having a first assignment constraint based on the designated task constraint, and including a second assignment completable by the second resource and having a second assignment constraint based on the designated task constraint; and

a component to identify a first work-amount for the first assignment and a second work-amount for the second assignment from the total-work-amount for the designated task; and

a component to ~~independently~~ individually schedule the first assignment based at least on the first assignment constraint, ~~and the first resource constraint, and the first work-amount~~ and the second assignment based at least on the second assignment constraint, ~~and the second resource constraint, and the second work-amount~~ so that the first assignment and the second assignment are scheduled to have different start times.

87. (Previously Presented) The computer system of claim 86 wherein the component that schedules the assignments schedules assignments of a high priority task before scheduling the assignments of a low priority task.

88. (Previously Presented) The computer system of claim 86 wherein the component that schedules the assignments schedules the assignments in an adjusted priority order, the priority of an assignment based on the priority of its task and adjusted based on availability of resources of the assignments.

89. (Currently Amended) The computer system of claim 86 wherein the component that schedules the assignments schedules assignments of ~~independent-tasks~~ without dependencies before the assignments of ~~dependent-tasks~~ with dependencies.

90. (Previously Presented) The computer system of claim 86 wherein the component that schedules the assignments schedules assignments of tasks in dependency order of the tasks.

91. (Previously Presented) The computer system of claim 86 wherein the component that schedules the assignments of tasks schedules assignments to satisfy start-on constraints before satisfying must-finish-by constraints.